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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,866	08/28/2003	Jun Hiraoka	1907-0212P	6373
2292	7590	09/15/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			MORRISON, THOMAS A	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	
			3653	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/649,866

Applicant(s)

HIRAOKA, JUN

Examiner

Thomas A. Morrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the angle" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 2, this claim recites an abutting member formed thereon for abutting against a portion of the support to prevent the pivot axis of the sensor lever from moving in **said direction**... However, claim 1 recites two different direction limitations. Namely, "a direction toward and away from sheets of paper in the feeder" in lines 9-10 of claim 1, and "a direction away from the sheets in the feeder" in lines 13-14 of claim 1). As such, it is unclear which direction is referred to in the dependent claim 2. Is it the direction toward and away from the sheets? Alternatively, is it the direction away from the sheets?

Claim 3 recites an elongated hole having an enlarged round hole portion, said pivot axis of the sensor lever having a noncircular section of a dimension that permits the sensor lever to pivot in said enlarged round hole portion and that prevents the pivot axis of the sensor lever from moving into the elongated hole when there are few sheets

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or not sheets piled in the feeder. Claim 3 appears to be inaccurate. If the sensor lever is already pivoting in the enlarged round hole portion of the elongated hole, how can the pivot axis be prevented from moving into the elongated hole?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Hiltwein et al. In particular, Hiltwein et al. discloses all of the limitations of claim 1.

Regarding claim 1, Figs. 1-3c show that in a sheet feeder (Fig. 1) for feeding sheets of paper (1) piled therein

a sensor lever (including 8, 11 and 16) having an end thereof (near 8) abutting against sheets piled in the sheet feeder (Fig. 3b), said sensor lever (including 8, 11 and 16) being pivotable about a pivot axis (12), the angle of the lever (at least 16) changing in accordance with the number of sheets (1) in the feeder;

a support (including 14) for the pivot axis (12) of the sensor lever (including 8, 11 and 16), the support (including 14) permitting the pivot axis (12) to move in a direction toward (Fig. 3b) and away from (Fig. 3a) sheets of paper in the feeder;

whereby, when a large number of sheets (1) are loaded in the feeder the sensor lever (including 8, 11 and 16) and the pivot axis (12) moves in a direction away from the sheets (1) in the feeder. It is the examiner's position that as the height of the stack

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of paper is increased, the lever (including 8, 11 and 16) resting on the stack is moved up, which also moves the pivot axis (12) up (i.e., moves the pivot axis 12 away from the sheets in the feeder). See, e.g., Fig. 3b of the Hiltwein et al. patent.

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600